UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/518,622	03/03/2000	Mark Maggenti	000210	5801

			EXAMINER
23696	7590	01/26/2005	NGUYEN, THUAN T

Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

ART UNIT	PAPER NUMBER
2685	

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/518,622	MAGGENTI ET AL.
	Examiner	Art Unit
	THUAN T. NGUYEN	2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>03 March 2000</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments with respect to claims 1-23 have been considered but are moot in

view of the new ground(s) of rejection.

Claim Rejections - 35 USC 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> *A person shall be entitled to a patent unless --*
>
> *(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.*

3.   Claims 1-5, 8-10, and 21-22 are rejected under 35 U.S.C. 102(e) as being anticipated by

Hagerman et al. (U.S. Patent No. 6,301,238 B1).

Regarding claim 1, Hagerman diiscloses "in a communications system, an apparatus to

form a group of communication devices over a distributed network" (Figs. 2 &3, and col. 1/lines

33 to col. 2/line 11 and col. 6/line 55 to col. 7/line 18 for group communications), said apparatus

comprising: "a first node to establish a first channel with a first communication device; at least

one second node to establish at least one second channel with at least one second communication

device" (Fig. 6, item 74 for channel allocator in allocating a first channel to a first

communication device at a first node or BaseStation 18 and in allocating a second channel to a

second communication device at a second node or another BaseStation 18-as shown in Figs. 3 &

5- and col. 14/lines 4-15 & col. 14/lines 44-60); and "a controller electrically connected to said

first node and said at least one second node, said controller further comprising a database

module, wherein said database module comprises identification information of each of said

communication devices of said group, wherein said controller is dynamically configurable such

that any single communication device of said group is capable of sending packet data through its

respective channel to the other communication devices of said group" (base station controller

connects to both nodes or BSs in a conventional manner, col. 11/lines 48-65, using GPRS for

sending packet data, col. 7/lines 8-18 & col. 8/lines 1-11; and radio base station 62 further

includes position determiner 68 as a database module in determining the location of any mobile

station within the network, see col. 12/lines 6-34).

For claim 2, Hagerman suggests "wherein said packet data contains time-sensitive

information" (col. 4/lines 36-60, time is critical and sensitive since the time slots are needed for

allocating active channels in a TDMA scheme).

For claim 3, Hagerman discloses "wherein at least one of said communication devices is

a wireless communication device" (Figs. 2-5 for mobile stations 24 & 28).

For claim 4, Hagerman shows "wherein the controller further comprises a core module

and a net module, wherein said core module establishes identification of each of said

communications devices and redirects information from said communication devices to said net

module, wherein said net module operates and manages information transmitted between said

group of communication devices", i.e., channel allocator as a core module in assigning the

availabl channels to the mobile stations and a beamformer 82 as a net module since based on the

location information and identifying from the position determiner 68, the information can be

redirected from the beamformer to corresponding mobile stations (Fig. 6, and col. 12/lines 6-58).

For claim 5, Hagerman shows "wherein said database module is a part of said core

module" (Fig. 6 as explained above).

For claim 8, in view claim 4, Hagerman shows "wherein said core module and said net

module are connected to the distributed network" (col. 11/lines 49-65 as BS connected to a

PLMN distributed network).

For claim 9, Hagerman suggests "wherein the controller further comprises a top level

server, wherein said top level server sends and receives packet data from said communications

devices", i.e., top level server is from the PLMN network as packet data is sending and receiving

from the PLMN network (col. 11/lines 49-65 as BS connected to a PLMN distributed network

which uses GPRS for sending packet data, as described in col. 7/lines 8-18 & col. 8/lines 1-11).

For claim 10, Hagerman discloses "wherein said packet data comprises at least one of

identification data of said communication device, location data of said communication device,

and control data to establish, modify, or terminate group communications" (col. 12/lines 6-34).

For claim 21, in view of claim 1, Hagerman discloses "wherein said first communication

device is identified by a first identifier, and said at least one second communication device is

identified by at least a one second identifier, and wherein said controller maintains said identifier

of each of said communication devices and allows for transfer of packet data between said first

communication device and said at least one second communication device" (col. 12/lines 6-34).

For claim 22, in view of claim 1, Hagerman suggests "wherein said communication

devices operate over a secure mode", i.e., time division multiple access is known as a secure

mode for transmitting signals over a medium (col. 6/line 57 to col. 7/line 7).

Claim Rejections - 35 USC 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> *(a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made to
> a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was
> made.*

5.   Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagerman et

al. (U.S. Patent No. 6,301,238 B1).

Regarding claims 6-7, in further view of claim 4, Hagerman does not mention "wherein

said core module further comprises a billing log module, wherein said billing log module

maintains a history of activity between said communication devices" and "wherein said net

module further comprises a local log module, wherein said local log module maintains a history

of activity between said communication devices, and transfers said history to said billing log

module"; however, the Examiner takes an official notice that this is so well known in the art that

within the radio base station, modules for billing and activities are storing in the HLR/VLR or in

a designated database for billing activities. Therefore, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to modify Hagerman's system with

known features as billing log module contains a history of activities and a local log in order to

maintain a record of usage for each user or subscriber within the network.

6.   Claims 11-13, 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Hagerman et al. (U.S. Patent No. 6,301,238 B1) in view of Ganucheau, Jr. et al. (US Patent

6,529,740 B1).

Regarding claim 11, in view of claim 1, Hagerman does not address "wherein said first

channel further comprises a signal initiation protocol (SIP) channel, a media signaling channel,

and a media traffic channel"; however, Ganucheau teaches a same technique in group calls

related to SIP channel, signaling channel and a traffic channel (Ganucheau, Figs. 5-7, col. 14/line

20 to col. 15/line 30 for initiation (synchronizing) protocol and signaling/traffic protocols as the

process circles as a loop). Therefore, it would have been obvious to one of ordinary skill in the

art at the time the invention was made to modify Hagerman's system with Ganucheau's teaching

technique as disclosed in order to process and provide communication protocols to users.

For claim 12, in view of claim 1 and 11, Ganucheau further discloses "wherein said

controller further comprises a first timer, wherein said first timer measures a first elapsed time

period in which any of said communication devices has not transmitted information to said

controller, wherein said controller sends a message to said communications devices to enter an

dormant mode if said elapsed time exceeds a predetermined time period" (Fig. 8 for idle state as

the subscriber mobile has a predetermined time to enter idle state or dormant mode, see col.

15/line 30 to col. 16/line 13).

For claim 13, in view of claim 12, Ganucheau shows "wherein said controller further

comprises a second timer, wherein said second timer measures a second elapsed time period,

wherein if any of said communication devices has not transmitted information to said controller

within a predetermined time period, said controller sends a message to said communications

devices to elicit a response from said communication devices to determine if said communication

devices wish to remain active participants" (Fig. 8 and col. 16/lines 6-42 as a monolog is

detected from the user, the device is still remain active participants although back to idle state).

For claim 20, in view of claim 11 above, Ganucheau further discloses "wherein the

controller sends information to said first communication device regarding said at least one

second communication device" (Fig. 5/item 140 as broadcast message to subscriber radios as one

requests for communication).

Regarding claim 23, in a communications system, Hagerman teaches "an apparatus to

form a group of wireless push-to-talk communication devices over a distributed network, said

apparatus comprising: a first node to establish a first channel with a first wireless push-to-talk

communication device; at least one second node to establish at least one second channel with at

least one second wireless push-to-talk communication device; and a controller electrically

connected to said first node and said at least one second node, said controller further comprising

a database module, wherein said database module comprising identification information of each

of said wireless communication devices of said group, wherein said controller is dynamically

configurable such that any single wireless push-to-talk communication device of said group is

capable of sending packet data through its respective channel to the other wireless push-to-talk

communication devices of said group" as discussed in claim 1 above; however, Hagerman does

not mention the communication device is a wireless "push-to-talk" communication device;

however, this function is know in the art. In fact, Ganucheau teaches wireless communication

devices has this feature (col. 11/lines 1-16). Therefore, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to modify Hagerman's system with

Ganucheau's push-to-talk feature in order to have direct communication from handsets to other

within a private user group.

7.   Claims 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagerman

et al. (U.S. Patent No. 6,301,238 B1) in view of Cassidy et al. (US Patent 5,537,684).

Regarding claim 14, Hagerman does not further mention "wherein said controller further

comprises an arbitrator, wherein said arbitrator assigns a priority level to each of said

communications devices, wherein said priority level determines a hierarchy of transmission

privilege of said communications devices such that communication devices having a higher

priority level may interrupt the transmission of communication devices having a lower priority

level"; however, this technique is taught by Cassidy (Cassidy, Figs. 1-4, and col. 2/line 34 to col.

3/line 55 as calls request for priority is under the monitoring of a central controller 101 based on

user selected priority 304, for instance, emergency call is number 1 priority of the pending

request list). Therefore, it would have been obvious to one of ordinary skill in the art at the time

the invention was made to modify Hagerman's system with Cassidy's teaching technique of

assigning priority level within group communication, such that a higher priority is being

considered first for communication, other lower priority calls may be interrupted, as desired.

For claims 15-19, Cassidy further discloses for "wherein said assignment of priority level

is dynamically configurable" (system does automatically using procedures as shown in Figs. 11

& 13); "wherein the controller further comprises a buffer memory, wherein the buffer memory

stores said packet data until said communication device is ready to receive said packet data"

(memory 107 of Figure 1 stores call records (Fig. 2) contains packet data format (Fig. 3);

"wherein said buffer memory is used to minimize perceived latency of a user" (col. 3/lines 17-

55); "wherein some of said communication devices operate in different communication infrastructures" (private calls, emergency calls, interconnect calls as shown in Fig. 4); and "wherein the controller updates the identification information of said communication device when the identification information of said communication device has or is about to change" (Fig. 13 as the system continuously monitors and edits the updated list and the identification of devices, as soon as the update is finish, the identification information of said communication device has or is about to change, see col. 7/line 25-col. 8/line 33).

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Dailey, Stosz et al, Gregg et al., and Isley, Jr. et al. (in PTO 892 attached) disclose systems related to PTT systems and techniques.

9.   **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

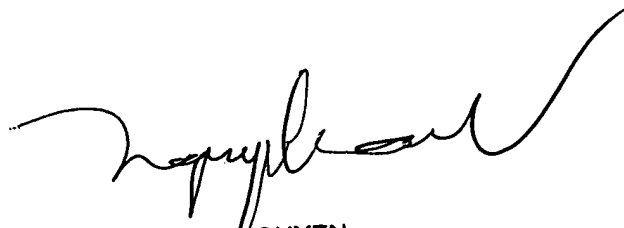**(703) 872-9306, (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II,

2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Tony Thuan Nguyen whose telephone number is (703)

308-5860. The examiner can normally be reached on Monday-Friday from 9:30 AM to

7:00 PM, with alternate Fridays off.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the **Technology Center 2600 Customer Service Office**

whose telephone number is **(703) 306-0377.**

TONY T. NGUYEN
PATENT EXAMINER

Tony T. Nguyen
Art Unit 2685
January 21, 2005